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PTO/SB/05 (08-00)  
Approved for use through 10/31/2002. OMB 0651-0032  
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE  
OMB Control Number 2001-0901

12/06/01

UTILITY  
PATENT APPLICATION  
TRANSMITTAL

(Only for new nonprovisional applications under 37 C.F.R. 1.53(b))

Attorney Docket No. 86038.000090

First Inventor Lines, James R.

Title HEAT EXCHANGER WITH INTEGRAL INTERNAL  
TEMPERATURE SENSOR

Express Mail Label No. EL871341353US

10/10/01  
10/10/01  
10/10/01  
10/10/01

## APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

1.  Fee Transmittal Form (e.g., PTO/SB/17)  
(Submit an original and a duplicate for fee processing)

2.  Applicant claims small entity status.  
See 37 CFR 1.27.

3.  Specification [Total Pages 16]  
(preferred arrangement set forth below)
 

- Descriptive title of the Invention
- Cross References to Related Applications
- Statement Regarding Fed sponsored R & D
- Reference to sequence listing, a table, or a computer program listing appendix
- Background of the Invention
- Brief Summary of the Invention
- Brief Description of the Drawings (if filed)
- Detailed Description
- Claim(s)
- Abstract of Disclosure

4.  Drawing(s) (35 USC 113) [Total Sheets 3]

5. Oath or Declaration [Total Pages 3]
 

- a.  Newly executed (original or copy)
- b.  Copy from a prior application (37 C.F.R. 1.63(d))  
(for continuation/divisional with Box 17 completed)
  - i.  **DELETION OF INVENTOR(S)**  
Signed statement attached deleting inventor(s) named in the prior application, see 37 C.F.R. 1.63(d)(2) and 1.33(b).

6.  Application Data Sheet. See 37 CFR 1.76

## ADDRESS TO:

Assistant Commissioner for Patents  
Box Patent Application  
Washington, DC 20231

7.  CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)

8. Nucleotide and/or Amino Acid Sequence Submission  
(If applicable, all necessary)
 

- a.  Computer Readable Copy (CRF)
- b. Specification Sequence Listing on:
  - i.  CD-ROM or CD-R (2 copies); or
  - ii.  Paper
- c.  Statement verifying identity of above copies

## ACCOMPANYING APPLICATION PARTS

9.  Assignment Papers (cover sheet & document(s))

10.  37 C.F.R. 3.73(b) Statement  
(when there is an assignee)  Power of Attorney

11.  English Translation Document (if applicable)

12.  Information Disclosure Statement (IDS)/PTO-1449  Copies of IDS Citations

13.  Preliminary Amendment

14.  Return Receipt Postcard (MPEP 503)  
(Should be specifically itemized)

15.  Certified Copy of Priority Document(s)  
(if foreign priority is claimed)

16.  Other: \_\_\_\_\_

17. If a CONTINUING APPLICATION, check appropriate box and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

Continuation  Divisional  Continuation-in-part (CIP) of prior application No.: \_\_\_\_\_  
Prior application information: \_\_\_\_\_ Examiner: \_\_\_\_\_ Group/Art Unit: \_\_\_\_\_

For CONTINUATION or DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

## 18. CORRESPONDENCE ADDRESS

 Customer Number of Bar Code Labelor  Correspondence address below

|         |           |          |  |
|---------|-----------|----------|--|
| Name    |           |          |  |
| Address |           |          |  |
| City    | State     | Zip Code |  |
| Country | Telephone | Fax      |  |

|                   |             |                                   |                  |
|-------------------|-------------|-----------------------------------|------------------|
| Name (Print/Type) | Roger Aceto | Registration No. (Attorney/Agent) | 24,554           |
| Signature         |             | Date                              | December 6, 2001 |

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.

J1064 U.S. PTO

12/06/01  
**FEE TRANSMITTAL  
for FY 2000**

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Patent fees are subject to annual revision.

TOTAL AMOUNT OF PAYMENT \$370.00

## Complete if Known

|                        |                 |  |  |
|------------------------|-----------------|--|--|
| Application Number     |                 |  |  |
| Filing Date            |                 |  |  |
| First Named Inventor   | Lines, James R. |  |  |
| Examiner Name          |                 |  |  |
| Group Art Unit         |                 |  |  |
| Attorney Docket Number | 86038.000090    |  |  |

**METHOD OF PAYMENT (check one)**

1.  The Commissioner is hereby authorized to charge indicated fees and credit any overpayment to:

Deposit

Account Number

033875

Deposit

Account Name

Harter, Secrest &amp; Emery LLP

Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17

Applicant claims small entity status. See 37 CFR 1.27

2.  Payment Enclosed:

Check  Credit card  Money Order  Other

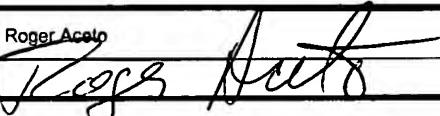
**FEE CALCULATION (check one)****3. ADDITIONAL FEES**

| Large Entity              | Small Entity | Fee Description |          | Fee Paid   |
|---------------------------|--------------|-----------------|----------|--|
| Fee Code                  | Fee Code     | Fee (\$)        | Fee (\$) |  |
| 105                       | 130          | 205             | 65       | Surcharge – late filing fee or oath  |
| 127                       | 50           | 227             | 25       | Surcharge – late provisional filing fee or cover sheet                     |
| 139                       | 130          | 139             | 130      | Non-English specification  |
| 147                       | 2,520        | 147             | 2,520    | For filing a request for <i>ex parte</i> reexamination                     |
| 112                       | 920*         | 112             | 920*     | Requesting publication of SIR prior to Examiner action                     |
| 113                       | 1,840*       | 113             | 1,840*   | Requesting publication of SIR after Examiner action                        |
| 115                       | 110          | 215             | 55       | Extension for reply within first month                                     |
| 116                       | 390          | 216             | 195      | Extension for reply within second month                                    |
| 117                       | 890          | 217             | 445      | Extension for reply within third month                                     |
| 118                       | 1,390        | 218             | 695      | Extension for reply within fourth month                                    |
| 128                       | 1,890        | 228             | 945      | Extension for reply within fifth month                                     |
| 119                       | 310          | 219             | 155      | Notice of Appeal   |
| 120                       | 310          | 220             | 155      | Filing a brief in support of an appeal                                     |
| 121                       | 270          | 221             | 135      | Request for oral hearing   |
| 138                       | 1,510        | 138             | 1,510    | Petition to institute a public use proceeding                              |
| 140                       | 110          | 240             | 55       | Petition to revive – unavoidable   |
| 141                       | 1,240        | 241             | 620      | Petition to revive – unintentional   |
| 142                       | 1,240        | 242             | 620      | Utility issue fee (or reissue)   |
| 143                       | 440          | 243             | 220      | Design issue fee   |
| 144                       | 600          | 244             | 300      | Plant issue fee  |
| 122                       | 130          | 122             | 130      | Petitions to the Commissioner  |
| 123                       | 50           | 123             | 50       | Petitions related to provisional applications                              |
| 126                       | 240          | 126             | 240      | Submission of Information Disclosure Stmt                                  |
| 581                       | 40           | 581             | 40       | Recording each patent assignment per property (times number of properties) |
| 146                       | 710          | 246             | 3655     | Filing a submission after final rejection (37 CFR § 1.129(a))              |
| 149                       | 710          | 249             | 355      | For each additional invention to be examined (37 CFR § 1.129(b))           |
| 179                       | 710          | 279             | 355      | Request for Continued Examination (RCE)                                    |
| 169                       | 900          | 169             | 900      | Request for expedited examination of a design application                  |
| Other fee (specify) _____ |              |                 |          |  |
| SUBTOTAL (3) (\$)         |              |                 |          |  |

\* Reduced by Basic Filing Fee Paid

**SUBMITTED BY**

Complete (if applicable)

|                   |   |                                   |        |           |                  |
|-------------------|---|-----------------------------------|--------|-----------|------------------|
| Name (Print/Type) | Roger Acosta  | Registration No. (Attorney/Agent) | 24,554 | Telephone | 716-232-6500     |
| Signature         |  |                                   |        | Date      | December 6, 2001 |

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**CERTIFICATE OF EXPRESS MAIL UNDER 37 CFR SECTION 1.10**

DOCKET NO.: 86038.000090

APPLICANT: James R. Lines

TITLE OF INVENTION: HEAT EXCHANGER WITH INTEGRAL INTERNAL  
TEMPERATURE SENSOR

I hereby certify that

Utility Patent Application Transmittal

Fee Transmittal Form (in duplicate) w/check in the amount of \$370.00

12 pages of specifications

3 pages of claims

1 page Abstract

3 sheets of drawings

Declaration w/Power of Attorney

Recordation of Assignment (in duplicate) w/assignment document and Check in the  
amount of \$40.00

Return Receipt Postcard

are being deposited with the United States Postal Service "Express Mail Office to Addressee" service under Express Mail Label #EL871341353US addressed to the Commissioner of Patents, Box Patent Application, P.O. Box 2327, Arlington, VA 22202, on December 6, 2001

Brenda L. Ricci  
Brenda L. Ricci